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(71) Applicant (for all designated States except US): **TOUDAI
TLO, LTD.** [JP/JP]; 3-1, Hongou 7-chome, Bunkyo-ku,
Tokyo, 1130033 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MORIMOTO,**
Chikao [JP/JP]; 5-25-16, Matsubara, Setagaya-ku, Tokyo,
1560043 (JP). **OHNUMA, Kei** [JP/JP]; 5-1-37, Hiroo,
Shibuya-ku, Tokyo, 1560043 (JP).

(74) Agents: **SHIMIZU, Hatsushi et al.**; Kantetsu Tsukuba
Bldg. 6F, 1-1-1, Oroshi-machi, Tsuchiura-shi, Ibaraki,
3000847 (JP).

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(54) Title: METHODS OF IDENTIFYING IMMUNOREGULATORY AGENTS, IMMUNOREGULATORY AGENTS, AND
USES THEREOF

(57) Abstract: The present invention provides methods of identifying a substance that down-regulates or up-regulates an immune response and kits used for the identification methods. A method of this invention comprises detecting a substance that inhibits or enhances the interaction between CD26 and caveolin-1. Another method comprises detecting a substance that inhibits or enhances the interaction between caveolin-1 and Tollip. Still another method comprises detecting a substance that inhibits or enhances the interaction among caveolin-1, Tollip, and IRAK-1. The present invention also relates to immunoregulatory agents comprising a substance that down-regulates an immune response, such as siRNA against caveolin-1 or Tollip. The invention further provides immunoregulatory agents comprising a substance that up-regulates an immune response. These agents are useful for treating inflam-
matory diseases, autoimmune diseases, or other immune-mediated disorders.



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